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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,744	02/22/2002	Allan Wallace	24,577-18	8415
38824	7590	01/19/2005	EXAMINER	
FULLBRIGHT & JAWORSKI L.L.P. 80 SOUTH EIGHTH STREET SUITE 2100 MINNEAPOLIS, MN 55402			THOMPSON, JEWEL VERGIE	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/080,744		WALLACE, ALLAN	
	<b>Examiner</b>		<b>Art Unit</b>	
	Jewel V Thompson		2855	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 19-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-26 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 19-22 is/are rejected.
- 7) ☒ Claim(s) 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____  | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### *Claim Objections*

1. Claim 4 is objected to because of the following informalities:

Claim 4 has not previously claimed "the deformable element".

Claim 4 is ambiguous. Examiner is not quite sure what is meant by "between abput – 101/min"

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 3, 5 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hutchinson (5,945,608).

**Regarding claim 1**, Hutchinson teaches a fluid flow sensing apparatus (10), comprising: a flow-responsive element (18) projecting into a fluid flow path; a magnet (20) coupled to the flow responsive element for generating a magnetic field; and

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to detect a change in the magnetic field caused by a position of the element in response to a fluid flow (col. 6, lines 34-36).

**Regarding claim 3**, Hutchinson teaches the flow-responsive element can change position in more than one direction (col. 6, lines 48-50).

**Regarding claim 5**, Hutchison teaches the sensor is in communication with a fluid flow controller (col. 9, lines 30-33).

**Regarding claim 19**, Hutchinson teaches a flow responsive element projecting into a fluid flow path; the element being supported at a zero-flow position in response to a fluid flow, the element further being biased into the zero-flow position in the absence of a fluid flow (col. 10, lines 37-39); a magnet (20) coupled to the flow responsive element (18); and a sensor (22) for detecting a change in position of the magnet

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchinson.

**Regarding claims 2 and 20**, Hutchinson teaches the apparatus has a sensitivity that is generally inversely related to a pressure generated by the fluid flow. Although

Hutchinson does not explicitly teach the apparatus has a sensitivity that is inversely related to a pressure generated by the fluid flow, since as the fluid flows slowly pass the sensor, the sensitivity is high and as the fluid flow pass the sensor at a high speed the sensitivity is lost. It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have known that the inverse relationship between the pressures generated by the fluid and the sensitivity of the apparatus is used by Hutchinson for the purpose of determining the flow of the fluid.

***Claim Rejections - 35 USC § 103***

4. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchinson in view of Gruenke et al (5,259,373).

**Regarding claim 21**, Hutchinson teaches a magnet coupled to the deformable element; and a sensor adapted to detect a position change of the magnet. Hutchinson fails to teach a mask portion; a hose, the hose cooperating with the mask portion to define an air pathway. Gruenke et al teaches a mask portion (14) and a hose (12), the hose cooperating with the mask to define an air pathway (figs. 2 and 4). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have attached the mask and hose of Gruenke et al in the flow sensor of Hutchinson for the purpose of determining a trend value of the patient's airway sounds for preventing the onset of obstructive apnea (abstract).

**Regarding claims 22** Hutchinson teaches a Hall effect sensor (col.6, lines 42-44)

***Allowable Subject Matter***

5. Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 24-26 are allowed.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-5, 19-26 has been considered but is moot in view of the new ground(s) of rejection.

Applicant has not responded to the claim objection. Objection stands.

**Applicant argues** that the reference cited does not teach the amended claim including a magnet coupled to the flow responsive element.

**Examiner disagrees.** Based on the amended claims, a new reference has been cited which does teach the amended limitation

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

3,636,767     Duffy teaches an electric signal is produced which is dependent on  
fluid flow

4,777,833     Carpenter teaches a ferromagnetic velocity sensor


5,767,419     Hutchinson teaches a Hall effect flow switch flow meter

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jewel V Thompson whose telephone number is 571-272-2189. The examiner can normally be reached on 7-4:30, off alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jvt

January 12, 2005

  
EDWARD LEFKOWITZ  
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